

Bill 25 (2019), CD1

Testimony

MISC. COM. 163

ZH

From: CLK Council Info
Sent: Wednesday, February 26, 2020 4:59 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Climate Protector
Phone 8082943689
Email Tbohl8@yahoo.com
Meeting Date 02-27-2020
Council/PH Committee Zoning
Agenda Item Bill25 CD2 (Elefante)
Your position on the matter Support
Representing Organization
Organization Climate Protectors Coalition
Do you wish to speak at the hearing? No

Aloha Chair Menor and Zoning, Planning, and Housing Committee Council members:

The Climate Protectors Coalition strongly supports the CD 2 (Elefante) version of Bill 25!
The other drafts of Bill 25 are too watered down to be supported.

The Climate Protectors Coalition is a new group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, and rising sea levels. This crisis is an existential threat to Hawai'i! We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible.

Written Testimony This version of Bill 25 recognizes that one important way for Oahu to address the climate crisis is to shift to solar electric water heaters and electric motor vehicles from those powered by fossil fuels—natural gas and gasoline or diesel that produce far more greenhouse gases. This Bill 25 reasonably requires residential and commercial buildings to install solar hot water heating and have 25% ready access for electric vehicles. These are needed steps to help Hawaii achieve its clean renewable goals and become carbon neutral as soon as possible.

Some argue that this would raise already-high housing costs. But, the temporary short term increases are not major and will be more than offset by long term savings. This proposal is clearly cost beneficial overall! It can only be portrayed as raising costs if you are short-sighted, fail to consider long term cost savings and benefits, and ignore the overwhelming external costs of the climate crisis—more severe storms, sea level rise, and death of the coral reefs that protect our beaches and shorelines, including billions of dollars of

shorefront homes and infrastructure.

This Bill 25 CD2 (Elefante) is the most prudent approach for Oahu, our keiki and our future. Please pass this CD2 (Elefante) version of Bill 25. Mahalo!

Testimony

Attachment

Accept Terms and
Agreement 1

IP: 192.168.200.67



**Hawaiian
Electric**

**TESTIMONY BEFORE THE HONOLULU CITY COUNCIL
COMMITTEE ON ZONING, PLANNING AND HOUSING**

**Comments in Support of
Bill 25 (2019), CD1
Proposed CD2 to Bill 25 (2019), CD1 (Elefante)
Relating to the Adoption of the State Energy Conservation Code**

Thursday, February 27, 2020
9:00 a.m., Agenda Item #11
Committee Hearing Room

Dear Chair Menor, Vice Chair Waters, and Members of the Committee,

Hawaiian Electric Company, Inc. (Hawaiian Electric) is **writing in support of Bill 25 (2019), CD1 and Councilmember Elefante's Proposed CD2, Relating to the Adoption of the State Energy Conservation Code.** Bill 25 (2019), CD1 and the Proposed CD2 are proposing to regulate the design and construction of residential and commercial buildings for the effective use of energy. Two areas of the bill that Hawaiian Electric has focused on include solar photovoltaic (PV) readiness for single family homes, which is mentioned in the Proposed CD2 version, and electric vehicle infrastructure for homes and commercial spaces.

Over the past several months, Hawaiian Electric has worked with numerous stakeholders and participated in several meetings in an effort to bridge various viewpoints and move towards a solution that all parties could agree upon.

First, with regard to the PV readiness proposal, Hawaiian Electric believes PV readiness can serve as a catalyst to renewable generation and can contribute to the City's renewable goals. Thus, Hawaiian Electric supports a PV-ready requirement for new single-family residential development, but not for all new residential development. Hawaiian Electric's rationale is based on a variety of factors that make PV-ready as a requirement for multi-unit dwellings (MUD) impractical from a cost and implementation perspective. We understand through discussions with developers that installing PV on all MUDs presents multiple logistical, physical, and cost challenges. Therefore, Hawaiian Electric would recommend clarifying language to Councilmember Elefante's Proposed CD2 version that

clearly defines “residential buildings.” As currently worded, “residential buildings” could potentially include single-family homes as well as MUDs.

Second, for Bill 25 (2019), CD1 Hawaiian Electric has focused on electric vehicle infrastructure for homes and commercial spaces. Bill 25 (2019), CD1 has the potential to make a big impact on the availability of EV charging infrastructure, particularly in areas of high population density. These areas are typically ideal locations for EVs in that residents tend to have shorter driving distances than those living in less dense, but more distant locations from the city center. Existing commercial locations and multi-family buildings face expensive retrofits to their parking facilities to be EV ready, with individual tenants facing a potentially long and onerous process to gain association or board approval to retrofit individual stalls. However, by making a proactive requirement to plan for and incorporate EV charging into future large building projects, the costs will be lower.

Hawaiian Electric supports flexible and creative options for builders and developers when designing their facilities to meet the Bill’s objectives, while managing the costs associated with doing so. As a result, during discussions, Hawaiian Electric proposed to utilize a point system that would provide greater flexibility when designing new facilities. Hawaiian Electric is willing to work with the Committee on a proposed point system that could provide varying points depending on the proposed infrastructure solution, thereby creating a more flexible approach for developers to design their projects. For residential developers, the point system serves to incentivize higher capacity charging installations in common areas, thereby serving a greater number of vehicles in a more efficient manner. Another important component of the point system was to allow even greater flexibility for developers of low- and moderate-income housing, by including Level 1 charging infrastructure as an option for qualifying developments. Finally, the Companies suggested that the Level 2 charging station requirement amperage be established at 16 amps, which would help mitigate supporting infrastructure needs, such as conduit and transformer size, and manage other associated costs while providing about 12 miles of additional driving range for each hour charged.

In support of clean energy goals, both state and county policy mandate a transition away from imported fossil fuel in favor of alternative fuel, such as electricity, for ground transportation. All county Mayors have agreed to support a 100% clean transportation future, which implicates the need to begin providing charging infrastructure now to support future demand. Hawaiian Electric supports the growing need for EV charging infrastructure, and it

is increasingly evident that new building developments built today without EV charging capability will likely require retrofitting in the future. Proactive planning, such as deploying EV charging capability today will help to mitigate and otherwise avoid increased future expenses. While, it is true that vehicle charging infrastructure increases costs for developers, retrofitting for the same needs can cost several times more in the future. In addition, leveraging common area charging at new residential developments allows such costs to be shared amongst tenants, as opposed to placing the burden upon individual tenants.

The fact is, EV readiness will become an expected part of modern housing and commercial development, in much the same way as electricity and indoor plumbing became an expected amenity in the past. Providing EV charging may present future financial opportunities, as building owners can choose how much they want to charge EV drivers for using their charging stations and can potentially generate revenue by charging for electricity or can offer free charging to attract new residents or customers. Including EV charging infrastructure will ultimately increase the value of a development over time and will show a commitment to future generations with clear foresight.¹

EVs are coming fast, the U.S. electric vehicle market is accelerating rapidly with nearly ten years of year-over-year sales growth.² The need for more EV charging stations on Oahu is tremendous. Hawaiian Electric's backbone study forecasts that we will need seven-times more than the currently available EV infrastructure by 2030 to support the demand. One of the easiest and least expensive ways to provide for this future need is to include them in new building construction. While some express concerns that housing and commercial spaces should not become the "gas station" for EV drivers, EVs function differently than a typical internal combustion ("gas") vehicle. Gas vehicles require fill ups that take several minutes, whereas EVs charge at a slower rate, therefore it makes sense to charge where people will be staying for longer periods, like their homes or work. EVs will require behavioral shifts from vehicle owners, energy providers, and facility owners. It will be beneficial for future homes and workplaces to be built with their customer's needs in mind.

Hawaiian Electric supports zero-emission vehicles such as electric vehicles and recognizes the importance and positive impact the City and County can play in demonstrating

¹ According to the U.S. Green Building Council, projects can earn LEED certification points by adding EV charging stations.

² https://www.eei.org/issuesandpolicy/electrictransportation/Documents/FINAL_EV_Sales_Update_April2019.pdf

leadership in this important market. The Companies have developed an EV strategy that acknowledges the need for more public charging in order for this nascent technology to truly proliferate. In fact, Hawaiian Electric has undertaken several efforts to support the adoption of electric vehicles, such as the development of a growing DC Fast Charger network, with over 17 locations across the Companies' service territory.

Providing increased access to EV charging at workplaces, commercial locations and multi-family buildings are all key priorities identified in the Companies' Electrification of Transportation Strategic Roadmap. This bill will continue the tremendous progress that the state has made towards a cleaner and more sustainable transportation future.

Accordingly, Hawaiian Electric supports Bill 25 (2019), CD1 and the Proposed CD2 that include the concepts of PV readiness for single family homes and is willing to continue working with the Committee on a proposed point system as it relates to electric vehicle charging infrastructure as well as the language affecting PV readiness homes. Thank you for this opportunity to testify.



SIERRA CLUB OF HAWAI'I O'AHU GROUP

HONOLULU CITY COUNCIL
Zoning, Planning and Housing Committee Hearing

Testimony in SUPPORT of Bill 25 (2019) CD2 (Elefante)
RELATING TO THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE
Thursday, February 27, 2020 9AM

Aloha Chair Menor and members of the Zoning, Planning and Housing Committee,

On behalf of the Sierra Club O'ahu Group and our 8,000 members and supporters, we are in strong support of Bill 25 (2019) CD2 as proposed by Councilmember Elefante. This bill is an investment in Honolulu's future affordability and resilience.

We strongly urge the Zoning and Planning Committee to pass Bill 25 (2019) CD2 (Elefante) because it is a critical step toward a clean energy future. With the passage of this bill, our homes and businesses will be significantly more energy efficient, saving all of us money while reducing greenhouse gas emissions to combat climate change. As recent polls have shown, O'ahu voters want climate resilient policy and are adopting new behaviors.¹

According to a recent Staradvertiser article, Hawaii is passing significant milestones for EV adoption. "As of January, there were 11,081 passenger EVs in Hawaii, the state Department of Business, Economic Development and Tourism said in its monthly energy trend report. That was an increase of 2,650 vehicles, or a 31.4% jump from the same month last year, and 1,647 more vehicles, or a 17.5% jump from December 2019."² With this growing trend it is even more important to invest in Level 2 charging infrastructure. It is crucial for the City to set this course now and spare property owners prohibitively expensive retrofits for PV installation and EV charging.

Prioritizing affordability to working and middle class families is key to making a fair and enduring transition to a decarbonized economy. Bill 25 ensures a better future for Honolulu and its residents by making new homes and other buildings more affordable to operate. Our research shows that the slight increase in new construction costs - about 1% of the median condo price, or half a percent of a median single family home price - more than pays for itself through utility bill savings, and in the case of EV-readiness, through avoided gasoline purchases. In the same Star-advertiser as mentioned above regarding electric vehicles; the regular gasoline price in

¹ <https://www.civilbeat.org/2019/11/poll-oahu-voters-want-action-on-climate-change/>

² <https://www.staradvertiser.com/2020/02/21/breaking-news/electric-vehicles-top-11k-in-hawaii/>

Hawaii averaged \$3.65 per gallon, which was 43.2% higher than the national average this January. With this growing trend, cost savings will be had with avoided gasoline purchases. In addition, Solar water heaters save at least \$40 each month on water heating expenses. This saving estimate includes the slightly more expensive upfront cost of a solar water heater.

For those council members concerned about ensuring a freedom of choice in energy sources, Bill 25 (2019) CD2 (Elefante) allows just that. The bill specifically identifies the variance process authorized in state law to allow those paying for the energy expense to opt for a gas water heater if it is indeed cheaper for their household. The key to this variance is that it must be the ratepayer, not the developer, that opts for the gas water heater variance. This is fair as it is the ratepayer, not the developer, paying the monthly water heating expense.

In addition, we know that as the state achieves its 100% carbon neutrality goals, oil imports will diminish and the price of products derived from oil, like the gas company's synthetic natural gas, will steadily and significantly increase. For the sake of the gas company's employees and customers, it is crucial that the City and County of Honolulu help the gas company transition its source of fuel to something not derived from fossil fuels. Adopting Bill 25 CD2 (Elefante) is one key benchmark in that transition plan.

We thank the City Council for advancing a solution-oriented policy that prioritizes the health and wellbeing of the environment and people of O'ahu. We also appreciate the efforts of the Resiliency Office to be accessible and transparent in crafting policy. Bill 25 (2019) CD2 (Elefante) demonstrates a cost-effective equitable effort towards energy conservation with flexible options that reduce construction costs, make compliance easier, and provide long-term savings for residents.

Mahalo for the opportunity to support Bill 25 on third reading.

Lauren Watanabe
Program Manager
The Sierra Club O'ahu Group

SUPPORT BILL 25 TO UPDATE HONOLULU'S BUILDING ENERGY CODE

For a more affordable, climate-friendly future for O'ahu residents

The City Council has the opportunity to modernize Honolulu's outdated energy code, which governs the construction of new buildings, and so reduce energy costs for Honolulu residents. The updates in Bill 25 will make new buildings more energy efficient and give more people access to the savings that come from using solar energy and electric vehicles (EVs). The buildings built today will last for decades to come. Making these practical changes now is far more cost-effective than retrofitting buildings later for solar and electric vehicles – both of which are needed to meet local goals for clean transportation and 100% clean energy.

BILL 25 GIVES O'AHU RESIDENTS ACCESS TO:

- Energy-efficient new homes so residents save up to 65% on utility bills
- Home water heating that uses O'ahu's abundant sunshine instead of fossil fuels
- Improved air quality both indoors and outdoors
- More EV charging capacity at homes and businesses
- More capacity for solar panels on the roofs of new homes
- More flexibility for builders to use super-efficient tropical building standards

IMPORTANT UPDATES TO BILL 25 AFTER LOCAL COMMUNITY FEEDBACK:

- Now helps homeowners easily install rooftop solar panels by requiring new homes to be "solar ready"
- Now enables faster car charging by increasing residential EV-ready parking requirements from Level 1 to Level 2 chargers
- Now adds flexibility for how developers make new buildings EV-ready
- Now significantly reduces EV-readiness requirements for affordable housing

BUT WHAT ABOUT COSTS AND AFFORDABILITY?

Bill 25 actually improves long-term housing affordability for Honolulu residents and tenants. The slight increase in new construction costs - about 1% of the median condo price, or half a percent of a median single family home price - more than pays for itself through utility bill savings, and in the case of EV-readiness, through avoided gasoline purchases. The cost of new construction today is far lower than the cost of retrofitting buildings later; EV-readiness alone is four to eight times cheaper at the time of construction than it is as a retrofit. It's critical to energy affordability to make these changes to the energy code as soon as possible to save O'ahu residents' time and money now.

Bill 25 ensures a better future for Honolulu and its residents--current and future--by making new homes and other buildings cleaner, healthier, and more affordable to operate. Bill 25 is an important step to turn the tide on the impacts of climate change we are already experiencing, from beach loss and coral bleaching to more dangerous storms.



**Committee on Zoning, Planning and Housing
City and County of Honolulu
February 27, 2020 at 9 a.m.
Bill 25**

Aloha Chair Menor, Vice Chair Waters and Members of the Committee:

Tesla appreciates the opportunity to submit this testimony regarding Bill 25 which would modify the Honolulu Energy Code to establish an EV-ready infrastructure requirement. Absent convenient and widespread access to EV charging, the willingness of individuals to purchase an electric vehicle will be limited. Parking spaces where customers already park their vehicles for 8-10 hours, like at their place of residence or work, are ideal candidates for the deployment of charging infrastructure.

For this reason, Tesla strongly supports reforming the energy code to ensure that newly constructed parking facilities serving multi-unit residential buildings and workplaces have the necessary electrical capacity and wiring to support the deployment of EV charging. A very modest investment at the time of construction can ensure that EVs are a viable and practical option for a broader cross-section of Hawaiians and dramatically reduce the cost of deploying this infrastructure as compared to retrofitting charging solutions after the fact.

The Committee has before it two versions of Bill 25, CD1 and CD2. The CD1 version hews more closely to the bill as originally conceived, calling for a fairly straightforward requirement, whereby at least 25% of the spaces in newly constructed parking facilities are EV-ready. Tesla believes this approach is simple and relatively easy to implement. Furthermore, it is generally consistent with the structure of similar code reforms we have observed in other markets. That said, Tesla is very concerned about the definition of what qualifies as EV-ready in the context of parking facilities serving multi-unit residential buildings. Under the CD1 version of the bill, wiring and capacity sufficient to provide "Level 1" charging (equivalent to a standard home outlet) is deemed to sufficient. For modern EVs, most of which have a range in excess of 150 miles, a depleted battery would take approximately 30 hours to charge to full using Level 1 charging. Tesla does not believe most drivers will find this acceptable. If the Committee sees fit to embrace this version of the bill, it is of paramount importance to modify the measure so that the requirement in both the residential and commercial contexts requires infrastructure sufficient to support Level 2 charging. Not only does Level 2 charging provider for a better driver experience, it provides additional flexibility for managing charging and integrating renewable energy and can help enable future expansion to additional parking spaces through power sharing technologies.



The CD2 version embodies a much more complex approach, where rather than a uniform percentage-of-spaces requirement, building developers can instead pursue a point-based compliance pathway. Tesla's high level concern with the CD2 version of the bill as currently drafted is that under this approach the practical impact of the policy is at risk of being severely diluted. For example, for a planned 40 unit parking facility serving a multi-unit dwelling, the developer would need to accumulate 10 points. Under CD2 this could entail deploying Level 2 EV ready infrastructure to serve 10 individual dedicated stalls or deploying Level 3 (DC fast charging) EV ready infrastructure at 1 common area stall. Tesla disagrees with the premise that the latter is equivalent to the former in terms of the benefits it provides and its ability to effectively support EV adoption. Our experience suggests that most customers would prefer to have more reliable or dedicated access to Level 2 charging at their place of residence or at work rather than relying on a single DC fast charger that is shared and thus will not be predictably available. Expecting multi-unit building occupants or employees at a commercial location to monitor if a Level 3 charger is available and to move their cars to access it throughout the day or overnight is simply unrealistic and impractical.

The ability to aggregate the compliance obligation as proposed in the CD2 version of the bill is also deeply problematic, compounding the issue discussed above and will further subvert the policy objectives of this initiative and result in some parking facilities ending up with almost no infrastructure deployed at all. While the CD2 version seeks to safeguard this by establishing a compliance floor ("each individual project achieves no less than 10 percent compliance or adds a minimum of one electric vehicle charger ready parking space per project, whichever is greater 10% compliance or minimum of one EV-ready"), Tesla does not view this as sufficient and will still lead to a result where newly constructed facilities will not be equipped with an appreciable amount of charging infrastructure, and almost certainly not enough to meaningfully support and drive EV adoption. To prevent this, Tesla asks that the provisions related to aggregating across projects and phases be removed from the bill if the CD2 version is pursued.

Lastly, Tesla is concerned with the significantly reduced requirements for affordable housing units under the CD2 version of Bill 25. Given the relatively small cost of deploying EV ready infrastructure if done at initial construction, the end result of this policy approach will be to limit the ability of low-income households to adopt EVs, by reducing their access to charging solutions as compared to non-low income households. This threatens to literally build inequitable access to EVs into the building stock in Hawaii.

Tesla appreciates the opportunity provide this feedback. While we remain very much supportive of this initiative, we believe each of the versions before the Committee requires



substantive amendments. On balance, Tesla believes the CD1 version, provided it is amended to require Level 2 EV ready infrastructure across the board, is the preferred approach. If, however, the Committee decides to embrace the CD2 version of the bill, we hope that you will consider amending it consistent with our feedback above to ensure that at the end of the day, the goal of evolving Hawaii's building stock to ensure widespread and convenient access to EV charging is realized.

From: CLK Council Info
Sent: Thursday, February 27, 2020 6:47 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Susan Gorman-Chang
Phone 818-723-0767
Email sggc@dslextreme.com
Meeting Date 02-27-2020
Council/PH Committee Zoning
Agenda Item 11
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? Yes

Written
Testimony

Mahalo for all your hard work and progress made on Bill 25. I strongly support it with one important exception, that being your elimination of the specific county requirement for a solar water heaters in new single family residences.

Natural gas contributes to global warming. Its infrastructure and use is dangerous which is why several cities in California have banned ALL natural gas in ALL new construction. The Pipeline and Hazardous Materials Safety Administration has data on more than 3,200 accidents deemed serious or significant since 1987 involving natural gas. A "significant incident" results in any of the following consequences: fatality or injury requiring in-patient hospitalization, \$50,000 or more in total costs, releases resulting in an unintentional fire or explosion.

Solar water heaters are cheaper in the long run for home owners. Joseph Boivin, former Executive VP of Hawaii Gas testified, "Solar water heaters may be a little more expensive up front, as compared to installing a gas water heater, but after a few years the hot water is free. Despite the claims, the economics do not in any way favor the ongoing use of gas energy over the sun."

This bill allows for a loophole that should be closed. It assumes that individuals are making the choice for a gas water heater, yet the truth is that developers are choosing for them, installing gas water heaters in new homes and circumventing entirely the spirit of this portion of the bill.

Mahalo for all your work on this fantastic bill and please just close this loophole and mandate solar water heaters on all new single family residences.

From: CLK Council Info
Sent: Wednesday, February 26, 2020 10:55 PM
Subject: Public Infrastructure, Technology and Sustainability Speaker Registration/testimony

Speaker Registration/Testimony

Name Lisa van den Heuvel
Phone 8083814412
Email lisa4realestate@gmail.com
Meeting Date 02-27-2020
Council/PH Committee PITS
Agenda Item 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Aloha Lisa,

The Honolulu City Council's Committee on Zoning, Planning and Housing will be taking public testimony on Bill 25, a measure that modernizes Honolulu's building energy code. Please take a moment to submit written testimony in support today—and attend the hearing on Thursday, July 25th at 9am at Honolulu Hale, if you can.

Bill 25 helps our climate and clean energy future in three ways:

Written Testimony

It updates the existing building efficiency code—which is over thirteen years out of date—with new energy saving measures, such as better insulation, improved lighting, and smarter controls for new residential and commercial construction. This alone is estimated to save nearly \$1 billion in energy costs for O‘ahu over the next 20 years.

It ensures that all new homes will come equipped with either a solar water heater, a high-efficiency heat pump water heater, or a “smart” grid-interactive water heater (that will allow us to use more renewable energy on the power grid).

It requires that new commercial and multi-family development, above a certain size, be “electric vehicle-ready” (having the wiring, conduit, and electrical capacity for charging stations to be installed later) in at least 25% of the parking stalls. Studies have shown that installing EV infrastructure at the time of construction can be 91% less expensive than post-construction retrofits.

These are significant, cost-effective changes that will help to dramatically reduce the greenhouse gas emissions from our new homes and buildings while helping to foster our

transition to clean transportation.

We are asking that the EV-ready provision of Bill 25 be amended to require capacity for Level 2 charging (instead of only Level 1) for new building construction. We also believe that 100% of new parking stalls should be EV-ready—a requirement that the city of Vancouver already has on the books.

Testimony

Attachment

Accept Terms and
Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Wednesday, February 26, 2020 9:54 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Phyllis Fong
Phone 8083581851
Email phylfong@yahoo.com
Meeting Date 02-26-2020
Council/PH Committee Zoning
Agenda Item 11
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony I am in favor of energy efficiency measures for all new residential properties, including solar water heating (not gas), infrastructure for EV charging (level 2) and supporting EV purchases with incentives. Please pass Bill 25 this year so that we can reach 100% renewable energy by 2030.

Testimony Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Wednesday, February 26, 2020 5:27 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Deborah McMenemy
Phone	808-866-4460
Email	burma87@gmail.com
Meeting Date	02-27-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	I, as an EV owners, support the idea of changing the electrical code to ensure EV ready infrastructure is part of new construction.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



Support Bill 25!

Testimony for Bill 25

Zoning, Planning and Housing Committee

Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"

February 27, 2020, 9:00 AM hearing

We need to act quickly to reverse climate change, the sooner and stronger we act, the less problems we will face in the future. This is definitely an ounce of prevention versus a pound of cure. And we no longer have the luxury of finding solutions where every person and every business is guaranteed to benefit.

Simply put, To stop and reverse climate change we need to burn less things.

Burning more natural gas instead of coal will not stop climate change.

<https://www.nationalgeographic.com/news/energy/2014/09/140924-natural-gas-impact-on-emissions/>

There was a time when we hoped we could use natural gas temporarily while we found more clean energy sources. That time has passed, and we need to drastically reduce the burning of all fossil fuels, including natural gas.

It has been shown that burning renewable biofuels **increases** the amount of greenhouse gases in the atmosphere.

www.keeppoilintheground.com

<http://theconversation.com/biofuels-turn-out-to-be-a-climate-mistake-heres-why-64463>

Biofuels will not stop climate change. We urgently need solutions that do not involve burning stuff.

Solar water heaters are a no brainer solution for Hawaii. I personally had a solar water heater put on my last house, and it paid for itself in reduced energy bills, in **less than a year**. (including the cost of installation and everything)

Bill 25 doesn't even reduce the amount of fossil fuels burned by Hawaii Gas. This bill just says, we don't want you to burn any more than you already are. If Hawaii Gas truly cared about the environment they would start investing in energy solutions that don't require burning things that pollute our atmosphere.

As far as the electric car charging station portion of the bill, I own an electric car and I have previously owned pets. I have had the experience of looking for a rental property that accepts pets, and also I have had the experience of looking for a rental property that has reliable access to vehicle charging. Neither one is easy.

I can tell you it is currently much harder to find a rental property that has reliable access to vehicle charging than a rental property that accepts pets. It is very difficult to own an electric car if you can't plug it in at home and this lack of available chargers is affecting people's decision to chose electric vs gas vehicles.

Thank you for your continued support of these urgently necessary environmental bills.

Sincerely,

Matthew Geyer

Honolulu, HI 96822

keepoilintheground@gmail.com

www.KeepOilInTheGround.com

<https://www.instagram.com/keepoilintheground/>

Honolulu, HI 96822

From: CLK Council Info
Sent: Thursday, February 27, 2020 6:54 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Sigrid B. Southworth
Phone 808-550-0129
Email sigsouth@gmail.com
Meeting Date 02-27-2020
Council/PH Committee Zoning
Agenda Item Bill 25 (CD2)
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Aloha Chair Menor and members of the committee,

Written
Testimony

I am writing in support of Bill 25(2019) CD2. We live in very rapidly changing times and our government regulations need to be changing equally rapidly to keep up. Our ordinances must reflect attention to these changes. Our current codes are rather outdated and need to be changed to address affordability and efficiency. It is utterly foolish not to install both solar water heating and PV and EV capacities in all new structures – both homes and businesses. Hawaii, with our many days of full sunshine, especially needs to adopt renewable resource capacity.

Please add my voice to the strong community call for such updates. Again, I hope you will each support Bill 25 (2019) CD2.

Mahalo nui.

Sigrid B. Southworth

Testimony
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Wednesday, February 26, 2020 5:34 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Neelanthi Vadivel
Phone	8082216082
Email	neelanthi@yahoo.ca
Meeting Date	02-27-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25 CD2
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	Yes
Written Testimony	I am in support of this bill as it outlines clear ways to prepare for our future. The up front costs and cons are greatly outweighed by the massive benefits and long term savings.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
February 27, 2019, 9:00 AM hearing

Aloha Chair Menor and members of the Committee,

I am testifying in strong support of Bill 25, CD2, introduced by Councilmember Elefante "Relating to the Adoption of the State Energy Conservation Code." The changes proposed in Bill 25, CD2 have been proven cost-effective. Improving the energy efficiency of new buildings by updating outdated building codes is the most immediate step Oahu can take to reduce greenhouse gas emissions and to transition this island to clean energy and transportation. Specifically, the updates proposed in CD2 will make the new buildings more energy efficient and give all Oahu residents access to the energy savings from using solar energy and electric vehicles.

I urge you to advance Bill 25, CD2, to help our island progress towards a livable, stable future.

Thank you for the opportunity to testify.

Sincerely,

A handwritten signature in dark ink, appearing to read "Therese Argoud".

Therese Argoud, MPH

3314 Woodlawn Drive

Honolulu, Hawaii 96822

CITY COUNCIL, CITY AND COUNTY OF HONOLULU
COMMITTEE ON ZONING, PLANNING AND HOUSING
REGULAR MEETING, COMMITTEE MEETING ROOM, THURSDAY,
FEBRUARY 27, 2020 9:00 A.M.

**Testimony in support of Agenda item 11.
Bill 25 CD2**

Chair Menor, members of the Committee, I am William Reese Liggett speaking as an individual and from my 28 years of experience in the real estate industry and 20 years on my residential solar systems. **And I give my strongest support for Bill 25 CD2.**

But first let's look at the opponents of this Bill—first, the gas industry. The opponents seem very motivated. And here's why: They would handcuff new home owners to pushing out more global warming CO2 through the smoke stacks of their gas burners--and for what--so that the gas industry can make more money off of global warming--and not only now but way into the future because by going their route we'll be foreclosing the efficient facilities in our new housing and retaining our dependence on fossil fuels --even the thick exhaust from their ships that will deliver it to Hawaii. Their diabolical methods will make it yet more expensive in the future for home owners to go to efficient systems, efficient systems that save thousands every year--thereby increasing the gas industry's opportunity to make money at the expense of our environment and that of our children.

Next opponent: developers. Amortized over the term of a mortgage the few thousand dollars for the efficiency enablers amounts to a few dollars a month extra, about a half of a percent—a very small amount for the values added to the house in the case of a resale and a real enabler when the owner decides for solar. Finally efficiency setups are a huge step for Hawaii's need to get off expensive, dirty and climate warming fossil fuels

Councilmembers, decisions to make changes like these updated building and energy codes take foresight, courage, and leadership--three qualities you pride yourself in and that were planks in your election campaign platforms. Going with the gas industry merely makes a few people rich. **Please make the right call and support Bill 25 CD2.**
Thank you

Submitted by William Reese Liggett
4947 Maunalani Circle, Honolulu 96816

Speaker Registration/Testimony

Name James McCay
 Phone 8083210027
 Email jmccay@hotmail.com
 Meeting Date 02-27-2020
 Council/PH Committee Zoning
 Agenda Item 11
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha ZPH Committee,

Please support this Bill 25 that has already taken too long and already not strong enough.

Written
Testimony

Kudos to the non-profits and individuals who have taken their own time and passions to testify for what is correct and pono. Short-term, fiscal priorities have cost Hawai'i and the planet far too much already. Hawai'i will NOT be sustainable - and already is far from a leader - should this Bill 25 fail.

Please do what we need.

Mahalo and much aloha,
James

Testimony
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67



**TESTIMONY TO THE HONOLULU CITY COUNCIL
COMMITTEE ON ZONING, PLANNING AND HOUSING
CITY AND COUNTY OF HONOLULU
9:00 AM**

February 27, 2020

Chair Menor, Vice-Chair Waters, and members of the Committee:

RE: Bill No. 25 (2019) CD 1, Relating to the Adoption of the State Energy Conservation Code

My name is Dwight Mitsunaga, 2020 President of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii. Our members build the communities we all call home.

BIA-Hawaii is in opposition to Bill 25. We have strong concerns with regards to the proposed State Energy Conservation Code (SECC), and how it will impact housing affordability in Hawaii. As you all are well aware, Hawaii has the distinction of being one of the most expensive housing markets in the nation. We are in a housing crisis. Constricted supply and high demand have resulted in median prices of homes on Oahu currently reaching a new record of \$835,000. Increasing the supply of housing, together with minimizing the cost of housing construction while not compromising public health or safety, has been the focus of BIA-Hawaii over the last few years.

The State Energy Conservation Code (SECC) are not codes that deal with the protection of public health and safety. Rather, these codes are intended to save on energy consumption. While we support the need for energy conservation, there needs to be a common sense and economic assessment of the cost of compliance with these codes. **Mandating compliance with these codes as is being proposed in Bill No. 25 would be irresponsible, without first recognizing the impact on housing affordability on Oahu.**

As you all are well aware, Hawaii has the distinction of being one of the highest cost housing markets in the nation. Constricted supply and high demand have resulted in median prices of homes on Oahu topping out above \$830,000.00. Increasing the supply of housing at all price points, AND minimizing or eliminating increasing the cost of housing construction, which does not compromise public health or safety has been the focus of BIA Hawaii over the last few years.

The proposed CD 1 is a result of discussions and amendments made to the original bill based on meetings the Office of Climate Change, Sustainability and Resiliency had with stakeholders from the construction, environmental and public utility communities. While some agreements on language were made, the overall tenor of the bill, mandating compliance, still permeates the bill. Further confusing the process is that the proposed amendments to the State Energy Conservation Code involves the following:

- Review of the 2015 International Energy Conservation Code;
- The State's amendments to the 2015 International Energy Conservation Code which were adopted as the State Energy Conservation Code in March of 2017;
- The proposed amendments to the State Energy Conservation Code (March 2017) proposed by the State Building Code Council and the Department of Planning and Permitting as Bill No. 25.



The 2015 International Energy Conservation Code has two parts: Commercial and Residential. Our comments are on the proposed amendments to the Residential section of the code. Our concerns and proposed amendments to sections of the proposed Code Amendments are as follows:

Mandate for Electric Vehicle Charging Capability:

Bill 25, CD 1 proposed amendments to both the Commercial and Residential of the State Energy Conservation Code by adding new sections as follows:

Page 7, (Section 17) CD 1, Proposed Amendments to the Commercial Section (EV Charging Language currently not in IECC or SECC):

New Section--C406.8 Electric vehicle infrastructure. New residential multi-unit buildings that have eight or more parking stalls, and new commercial buildings that have twelve or more parking stalls, must be electric vehicle charger ready for at least 25 percent of the parking stalls. As used in this section, electric vehicle charger ready" means that sufficient wire, conduit, electrical panel service capacity, overcurrent protection devices and suitable termination points are provided to connect to a charging station capable of providing simultaneously an AC Level 1 charge per required parking stall for residential and multi-unit buildings. For commercial buildings, at least 25 percent of the parking stalls are required to be AC Level 2 charger ready.

Page 13, (Section 31) Bill 25 CD 1 Proposed Amendments to the Residential Section (EV Charging Language currently not in IECC or SECC):

New Section--R404.3 Electric Vehicle Capability. In addition to what is required by the Electrical Code, a dedicated receptacle for an electrical vehicle must be provided for each residence which provides at a minimum, Level 1 service.

BIA Comments and Recommendations on this Section:

It is important to understand that the Commercial Energy Code would apply to vertical, multi-family high-density developments (i.e. high-rise projects) with vertical parking structures, while the Residential Energy Code would apply to horizontal, one- or two-story projects with open parking lots.

Affordable housing projects priced at 80% AMI and below are rentals requiring government financing. Affordable/workforce housing priced between 80% and 140% AMI usually are viable when there is a proper mixture of higher priced units to subsidize the cost of building the lower priced units. Adding cost for EV charging requirements would result in less units being constructed which, given our current housing crisis, would be counter-productive.

Most affordable housing projects are multi-family. The proposed amendment requires 25% of multi-family at-grade parking areas to be "electric vehicle (EV) ready". In addition to the cost of \$11,300 per EV ready stall, this amendment creates a host of other problems. Also, the 25% requirements would appear to be unreasonable considering the current EV ownership is less than 1% in the entire state (August 9, 2019 Star Advertiser). For multi-family projects, the infrastructure cost (i.e. trenching, conduits, and transformer upgrades) are significant and will be passed on to the homeowner in the cost of the unit.

Parking stalls are normally attached and conveyed with units. Buyers who want EV ready stalls may not get them and buyers who don't want them may have to pay a premium for equipment that they will not use. The stalls will pull power from the unit's panel, so it is permanently attached to the unit. It's already a struggle to meet the minimum parking requirements, so providing extra stalls is out of the question.

Common areas usually benefit all of the residents in the project. EV parking stalls are NOT common areas and will only benefit those residents who have an electric vehicle. As such, costs associated with construction, installation and upkeep of these EV-ready parking stalls would not be a common area maintenance (CAM) fee charged to everyone.



If power is pulled from a common circuit, sub meters can be used, however, they will add more cost, and the AOA will have to read them, and bill each homeowner. The chargers will also have to have security to prevent unauthorized usage while the homeowner is away.

Finally, the chargers will most likely be used during peak electric usage hours. The homeowner will come home, plug in their car, and turn on lights and other appliances. Meanwhile, all the common area lights and streetlights will turn on. The transformers and lines within the development will all have to be upsized to accommodate these loads, costs which will also get passed on to the home buyer.

We strongly recommend that multi-family affordable housing projects be excluded from the "electric vehicle ready" requirements. As such we proposed the following amendment to these sections:

Bill 25 Proposed Amendments CD 2, Page 7, (Section 17) *C406.8 Electric vehicle infrastructure. New residential multi-unit buildings that have eight or more parking stalls, and new commercial buildings that have twelve or more parking stalls, must be electric vehicle charger ready for at least 25 percent of the parking stalls. As used in this section, electric vehicle charger ready" means that sufficient wire, conduit, electrical panel service capacity, overcurrent protection devices and suitable termination points are provided to connect to a charging station capable of providing simultaneously an AC Level 1 charge per required parking stall for residential and multi-unit buildings. For commercial buildings, at least 25 percent of the parking stalls are required to be AC Level 2 charger ready. Multi-family and workforce/affordable housing projects (i.e. those priced at 140% and below AMI) are exempt from this provision.*

Bill 25 Proposed Amendments CD 2, Page 13, (Section 31) New Section--*R404.3 Electric Vehicle Capability. In addition to what is required by the Electrical Code, a dedicated receptacle for an electrical vehicle must be provided for each single family residence which provides at a minimum, Level 1 service. Multi-family and workforce/affordable housing projects (i.e. those priced at 140% and below AMI) are exempt from this provision.*

BIA Comments and Recommendations on Residential Tropical Zone Code and Jalousie Windows:

We understand that the Energy Code is based on identified climate zones across the entire United States and establishes essentially energy performance standards for different climate regions of the country. The different zones recognize that energy standards for a house built to withstand Minnesota winters should not be the same for a house built in Waianae. The Tropical Zone Code, which was developed in Puerto Rico, not Hawaii, is intended to provide less restrictive performance standards due to the milder climate conditions of tropical regions.

While Hawaii falls under the Tropical Zone of the International Energy Conservation Code (IECC), sections of the existing State Energy Conservation Code (SECC) and some of the proposed amendments contained in Bill No. 25 will increase the cost of construction or remodeling a home on Oahu. Thus, making housing less affordable to more local residents and families.

For example, the Tropical Zone requires a Solar Heat Gain Coefficient (SHGC) or Efficiency of windows of .25. The SHGC is expressed as a number between 0 and 1. The lower a window's solar heat gain coefficient, the less solar heat it transmits. Essentially keeping the house cooler. However, in adopting a

SHGC of .25, the City and County of Honolulu will essentially eliminate Louver Jalousie Window Systems as an option for homeowners and developers.

Monolithic glass or glass used in louver jalousie window systems, unlike insulated glass (two pieces of glass, air space in the middle, inner pane coated), performs poorly in SHGC performance. The technology to improve the SHGC performance with single pane, monolithic glass to be comparable with insulated glass is not available.



The minimum air leakage of 1.2cfm per square foot for louver jalousie windows is not reasonable nor justified for a passive, naturally ventilated dwelling under the Tropical Code. The mere design of the louver jalousie window with thick glass blades overlapping a on the adjacent glass blades, providing glass on glass contact is very difficult. Dirt, debris on the glass blades, settling of the dwelling, will result in out-of-plumb/square openings that will prevent the glass blades from closing properly to comply with the 1.2 cfm per square foot leakage requirement.

We also suggest that the following requirement also be removed: "Not more than one-half of the area of the dwelling unit is air conditioned." In order to use the Tropical Zone Code which will allow for the use of Jalousie windows, a house located below 2,400 feet above sea level must not have more than ½ of the dwelling unit air conditioned. Tantalus on Oahu is roughly 2,000 feet above sea level, and Wahiawa is roughly 950 feet above sea level. That means that most of the developed area on Oahu would be eligible to use the less restrictive Tropical Zone Code PROVIDED less than ½ of the dwelling is air conditioned.

We believe that this condition would require renovation or remodeling of existing dwellings on Oahu unable to use the Tropical Zone Code as many existing dwellings have installed air conditioning in more than ½ of the existing dwelling.

The louver/jalousie window was designed and built to provide maximum ventilation within the window opening. There is no surrounding frame around the glass with weather seals to provide an air-tight seal when closed like sliding, hung, casement, awning window.

Bill 25 Proposed Amendments CD 2, Pages 10 and 11, (Section 24) Condition No. 1 be deleted and proposed condition No. 13 be amended to read as follows:

1. ~~Not more than one-half of the area of the dwelling unit is air conditioned.~~
13. Jalousie windows are allowed in the Tropical Zone and are exempt from the Window SHGH & Air Infiltration Rate Requirements stated in the Tropical Zone.

BIA Comments and Recommendations on Residential Tropical Zone Code Mandatory Ceiling Fans:

Bill 25 Proposed CD 1, Page 12, (Section 29):

R403.6.2 Ceiling fans (Mandatory). A ceiling fan or whole house fan is provided for bedrooms and the largest space that is not used as bedroom.

Bill 25 Proposed CD 1, Page 13, (Section 30):

R404.2 Ceiling fans (Mandatory). A ceiling fan or whole-house fan is provided for bedrooms, provided the whole house mechanical ventilation system complies with the efficacy requirements of Table R403.6.1.

We would strongly suggest the Council adopt the language approved by the County of Kauai which removed the MANDATE and reads as follows:

"A ceiling fan or ceiling fan rough-in [is] or whole-house fan may be provided for bedrooms and the largest space that is not used as a bedroom."

As such we recommend the following for CD 2:



Bill 25 Proposed Amendments CD 2, Page 12, (Section 29):

R403.6.2 Ceiling fans. A ceiling fan, ceiling fan rough-in or whole house fan may be provided for bedrooms and the largest space that is not used as bedroom.

Bill 25 Proposed Amendments CD 2, Page 13, (Section 30):

R404.2 Ceiling fans. A ceiling fan, ceiling fan rough-in or whole house fan may be provided for bedrooms, provided the whole house mechanical ventilation system complies with the efficacy requirements of Table R403.6.1.

Summary:

The proposed code changes also increase costs in other areas. Homes will have to be built airtight and blower door tested, new ventilation requirements will require additional fans, changes to the window solar heat gain coefficients increase the cost of windows, additional insulation over steel framing adds material and labor cost.

We understand and support the overarching goal of striving for energy self-sufficiency; however, the economic impacts of moving us in this direction must also be considered. The council should balance the economic impacts of our move to energy self-sufficiency by shifting most of the costs to those who can afford it and lessening the economic burden on those who can least afford it.

We believe the amendments to the CD 1 that we propose allows for the adoption of an energy code that recognizes the economic impacts of implementing this forward-looking legislation.

The City Council is in a position to improve housing affordability by eliminating code mandates and requirements that do not compromise public health and safety. Adding these unnecessary and costly requirements impacts housing affordability and will prevent more and more Oahu residents from obtaining housing they can afford.

We support adoption of the Energy Conservation Code **provided** it includes our proposed amendments. We appreciate the opportunity to express our views regarding this matter.



February 26, 2020

Committee on Zoning, Planning and Housing
Chair, Ron Menor
Vice Chair, Tommy Waters
Council Members, Elefante, Kobayashi and Manahan
Thursday, February 27, 2020, 9 a.m.

**BILL 25, CD1 – RELATING TO ADOPTION OF THE STATE ENERGY
CONSERVATION CODE**

Aloha Councilmembers:

I am submitting testimony on behalf of Hawaii Habitat for Humanity, Department of Treasury certified nonprofit Community Development Financial Institution (CDFI) and Habitat's Oahu affiliated organization, Honolulu Habitat for Humanity and Habitat for Humanity Leeward Oahu, to OPPOSE Bill 25, CD1.

Bill 25, CD1 would regulate the design and construction of residential and commercial building for the effective use of energy through the adoption of the State Energy Conservation Code.

While our organizations deem action on energy conservation to be critical to the long-term well-being of our island communities, and in fact, include solar water heaters, on the construction of new and renovated for sale housing for low income families, we oppose legislation that we believe unfairly impacts the increase in the cost of construction.

Under Bill 25, CD1 electric vehicle parking requirements would not only increase the construction costs that are then passed down to already cost-burdened families, it mandates a requirement that currently is not affordable to the families, that of owning an electric vehicle, for which a required parking spot would be built.

Habitat for Humanity is a nonprofit developer of affordable housing for our extremely -low, very-low and low-income households that earn up to 80% of the HUD Area Median Income (AMI). Low income families are currently unable to afford to purchase electric vehicles and will have no use for charging station parking stalls. Parking is already at a premium in multi-family developments and conserving parking stalls that will sit empty for vehicles that are not currently being driven by the residents makes no sense.

Our Habitat organizations recommend that the Electric Vehicle parking requirement be removed, or at least delayed for 10 years, specifically for affordable housing developments built for households at 80% AMI and below. Should these changes be made to Bill 25, CD1 we would stand in support of the bill.

Not only is the cost of Bill 25, CD1, Electric Vehicle parking requirements a cost burden, but there is no demand for such parking in our developments, since the cost of electric vehicles is out of reach for our low-income families.

Please consider a change that will not cost-burden Hawaii families that are already struggling with housing. These households do not need more pressure on their already stretched income.

Mahalo for your time and consideration. Please contact me directly at 808.847.7676 or email me at jean@hawaiihabitat.org should you have any question or need additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jean Lilley".

Jean Lilley
Executive Director



February 26, 2020

To: Committee Members on Zoning, Planning and Housing
The Honorable Ron Menor, Chair
The Honorable Tommy Waters, Vice Chair

Re: Strong Support of Bill 25

Hrg: February 27, 2020 at 9:00 AM at Committee Meeting Room

Aloha Chair Menor, Vice Chair Waters and members of the Committee,

The Hawaii Public Health Association is a group of over 600 community members, public health professionals and organizations statewide dedicated to improving public health. HPHA also serves as a voice for public health professionals and as a repository for information about public health in the Pacific.

The Hawaii Public Health Association strongly supports Bill 25, CD2 introduced by Councilmember Elefante. The updates to the building codes proposed in CD2 will help make new buildings more energy efficient and give Oahu residents access to the energy savings from using solar energy and electric vehicles.

The sensible, cost-effective changes proposed in Bill 25, CD2 will reduce the greenhouse gas emissions from our new homes and buildings and support Oahu's transition to clean energy and transportation. If we fail to take action now to reduce carbon impacts from new buildings, we miss a major health opportunity to support both climate health and to also reduce current and future health risks.

Climate change is the greatest threat to human health in the 21st century. Every individual will be affected by some combination of extreme weather, air pollution, sea level rise, infectious disease or a host of other challenges to daily living. We will experience changes in the severity and frequency of health problems that are already affected by climate and unprecedented or unanticipated health problems in places where they have not previously occurred.

Bill 25, CD2 is the most immediate action we can take now to limit the impacts of climate change on our environment and health. Please advance Bill 25, CD2.

Thank you for the opportunity to provide testimony on critical issues affecting the health of the people of Hawaii.

Respectfully submitted,

Tenaya Jackman, MPH
Board Member
Climate Change Legislative Sub-Committee Chair
Hawaii Public Health Association



Hawaii Solar Energy Association

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**TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION
IN REGARD TO BILL 25, RELATING TO THE ADOPTION OF THE STATE
ENERGY CONSERVATION CODE
BEFORE THE
HONOLULU CITY COUNCIL
ON
THURSDAY, FEBRUARY 27TH, 2020**

Chair Menor. Vice-Chair Waters, and members of the Zoning, Planning, and Housing Committee, my name is Will Giese, and I am the Executive Director of the Hawaii Solar Energy Association, Inc. (HSEA).

The HSEA was founded in 1977 to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the Hawaiian Islands. Our membership includes the vast majority of locally owned and operated solar installers, contractors, distributors, manufacturers, and inspectors across all islands.

HSEA SUPPORTS BILL 25. This ordinance pertains to regulating the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code (2017), subject to the local amendments within.

Bill 25 seeks to adopt the solar hot water variance into city ordinance, as well as include provisions that address a variety of energy efficient building design standards, and adopt provisions related to the use of electric vehicle charging stations in single and multi-family residences.

COMMENTS RE: SOLAR HOT WATER

On the solar water heating portion of this measure, both the legislature and the state's environmental court were clear in their understanding that renewable energy devices used to heat water are a boon for homeowners. Hawaii is a unique state, with a unique climate that makes it one of the most conducive states to technology like solar thermal heating. That is why Hawaii is the leading market for solar water heating sales in the entire United States.

Ten years ago, the state legislature enacted Act 204 and subsequently Act 155 requiring solar water heaters to be installed on all new single family homes. Act 204 of the 2008 regular legislative session¹ first established §196-6.5 as a means to encourage the adoption of inexpensive and energy efficient water heaters in new single-family home construction. Subsequently, in 2009 the legislature passed Act 155 which, specifically in

¹ See Act 204 and Gov. Msg. No. 947 on June 26, 2008 during the twenty-fourth state legislature in the state of Hawai'i.



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Part VII, sought to clarify the administration of the Solar Hot Water Variance Law. Act 155 asserted that variances would be “rarely, if ever, exercised or granted because the burden of proof will lie with the applicant to demonstrate that a solar water heater system, regardless of location or circumstance, is not cost effective in the context of a thirty-year mortgage.”

This measure allows the City a means to enforce this state requirement by enshrining a similar requirement into ordinance. It **could go a step further** by requiring that this same standard apply to multi-family housing, which helps reduce the cost of housing for low and middle income communities. In the confines of a 20-30 year mortgage, the cost effectiveness and utility of a solar water heater has been proven time and again to be overwhelming worth it.

The HSEA also offers a point-by-point response to some of the questions regarding the impacts of this measure, in an effort to set the record straight:

- It is absolutely correct that a “one size” water heating solution does not sufficiently address the broad Hawaii water heating market. Bill 25 gives options to consumers for a wide variety of water heating technologies and allows the homeowner the agency to choose what is most cost-effective for their situation. In fact, section R403.5.5 specifically includes an exception section allowing other water heating technologies to be used when installation of solar hot water is impractical or cost prohibitive, consistent with state law.
- The City & County of Honolulu is not at odds with the state law and variance process, but rather Bill 25 actually serves to alleviate the county of potential liability by granting the Department of Planning and Permitting enforcement abilities over state mandated water heating variances. This power is currently absent from state law.
- Rural residents who depend on clean gas still can depend on gas. Further, to suggest alternate water heating technologies are less resilient and “more vulnerable to natural disasters” is paradoxical and has no factual basis. If the intent is to suggest electrical infrastructure is more vulnerable than gas infrastructure, any potential vulnerability would also impact gas heating technologies as all major manufacturers utilize electronic spark-to-pilot ignition systems in gas water heaters. No electrical grid = no gas heater ignition. Alternatively, solar water heaters with a direct-current circulation pump still provide hot water in the event of a grid outage. Additionally, unlike gas, solar water heaters also come with 80 – 120 gallon tanks, which function as a “battery” that stores hot water during power outages.



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- Future home buyers will never pay an amount over \$6,000 on average more in energy cost if their option is limited to solar. Solar energy input will never be more costly than gas energy input. Further, their option is not limited to solar. To suggest otherwise is purposefully misleading and ignores the very clear exception clause described in the first bullet point. Additionally, this point presupposes that only solar water heaters are an option, and that new home buyers will be paying *retail* prices, when in fact the cost of the heater will be rolled into the total cost of their home. Finally, unlike gas technology, a consumer utilizing most renewable energy water heating tech (solar thermal, heat pump, PV) does not also have to pay a gas bill, thus they save money over the life of the system.

COMENTS RE: EV CHARGING PULLOUTS

Another part of this bill requires that electrical vehicle charging station pull outs are required in multi-family housing units. There are myriad benefits to electrifying transportation that drastically help the state lower its carbon emissions. By providing sufficient electric vehicle charging stations in multi-family housing, you allow the tenants of these housing units to realize the benefit and cost savings of an electric vehicle, while simultaneously reducing emissions from an ICE or carbon-based fuel burning vehicle by removing it from the road.

We do not currently support the language present in the CD2 draft of this bill and recommend that the Council adopt the previous draft with suggest amendments cited below. Currently, the CD2 draft relies on a point system that heavily favors level 3 charging stations, all of which are currently controlled by the electric utility. Although the HSEA supports development of Level 3 chargers along with Level 2 chargers, we believe that this point system will result in two negative outcomes:

1. **Developers will opt to install fewer EV chargers overall**, because they will receive compliance points that are 2X to 3X what a Level 2 charger will be, and there is no stop-gap to prevent customers from parking their car at a charger longer than it reasonably needed.
2. **The current compliance point discrepancy by charging level stifles market competition.** There are simply not enough suppliers or developers of Level 3 chargers to stimulate market competition that would drive down charging rates. The HSEA is also concerned that there are no price controls on HECO owned vehicle chargers, or no amendments that require a portion of all of the energy used to power these chargers be from renewable sources.

Relative to other jurisdictions that have considered adopting similar ordinances or statues, we suggest that the City consider amending Section (17), Subsection C 406.8 as follows:



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C406.8 Electric vehicle infrastructure. New residential multi-unit buildings that have eight or more parking stalls, and new buildings that have twelve or more parking stalls, shall be electric vehicle charger ready for at least ~~25~~ 100% percent of the parking stalls. As used in this section, "electric vehicle charger ready" means that sufficient wire, conduit, electrical panel service capacity, overcurrent protection devices and suitable termination points are provided to connect to a charging station capable of providing simultaneously an AC Level ~~1~~ 2 charge per required parking stall for residential and multi-unit buildings. For commercial buildings, at least ~~25~~ 100% percent of the parking stalls are required to be AC Level 2 charger ready. Charge method electrical ratings are provided below:

CHARGE METHODS ELECTRICAL RATING

Charge Method	Normal Supply Voltage (Volts)	Maximum Current (Amps – Continuous)	Supply power
AC Level 1	120V AC, 1-phase 120V AC, 1-phase	12A 16A	120VAC/20A (12-16A continuous)
AC Level 2	208 to 240V AC, 1-phase	≤ 80A	208/240VAC/20-100A (16-80A continuous)

Requiring 100% Level 2 charging addresses several issues. By requiring 100% compliance, the City ensures that renters and LMI homeowners, who benefit the most from EV cost savings, will be guaranteed a charger whether or not they own the unit or domicile.

The cost to install new infrastructure over retrofits is significantly lower, as demonstrated in Hawaii's Solar Water Heating variance as well as California's New Solar Homes mandate, which lower the cost of installing each unit by 30-75%. Additionally, these costs will be rolled into the purchase prices of the home, rather than an additional cost added later. The argument that mandates like these make housing less affordable is actually untrue. Rather, the cost savings the customer realizes by both avoiding retrofit pricing and by having an EV ready parking stall day 1 outweighs whatever nominal added cost to the purchase price of the unit.



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Level 2 charging, which charges EV at a much faster pace (2-4X faster than Level 1) eliminates so-called “range anxiety” among EV adopters, encourages greater adoption levels, and creates a potential business opportunity for commercial building owners.

COMMENTS RE: SOLAR CONDUIT AND ELECTRICAL PANEL READINESS

We support the language relative to what are essentially “solar ready homes”.

The HSEA SUPPORTS BILL 25, and we ask the council to adopt this ordinance subject to our comments above.

Thank you for the opportunity to testify.

From: CLK Council Info
Sent: Wednesday, February 26, 2020 6:07 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Dyson Chee
Phone	8084627570
Email	cheedyson@gmail.com
Meeting Date	02-26-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25 CD2 Elefante
Your position on the matter	Support
Representing	Organization
Organization	Hawaii Youth Climate Coalition
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

KAHANA FOUNDATION

TESTIMONY OF THE KAHANA FOUNDATION IN REGARD TO BILL 25, RELATING TO THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE BEFORE THE HONOLULU CITY COUNCIL ON THURSDAY, JANUARY 27, 2020

Dear Chair Menor, Vice Chair Waters, and Members of the Zoning, Planning and Housing Committee,

My name is Tenaiya Brookfield, and I am the Co-Founder & Director of Outreach at the Kahana Foundation. We are a Hawai'i-based environmental awareness organization working to improve our community's understanding and support for sustainable change.

Kahana Foundation **supports** Bill 25 CD1, relating to the adoption of the state energy conservation code.

The environmental and financial costs of climate change and global sea level rise are far too great and compounding to be sidelined by short term smaller costs.

At the international, state and county levels, governments are pushing efforts to reduce carbon emissions of the planet. Hawaii counties have pledged to eliminate fossil fuels from ground transportation by 2045¹. Hawaii State has set goals for zero emissions and a carbon neutral economy by 2045². Over 4 years ago, 196 countries negotiated the Paris Agreement, under which they committed to taking steps to limit the increase in global average temperature this century to 1.5 degrees C.

Despite these agreements and pledges, global carbon emissions increased 1.7% in 2017, a further 2.7% in 2018, and July 2019 was the hottest month on record for the planet in 140 years³. It is of critical importance that pledges and goals are followed with policies and plans of matching strength. Global temperature rise and subsequent sea level rise will have significant effects on coastal and island communities. The Hawaii Sea Level Rise Vulnerability and Adaptation Report estimates the lost value of flooded structures and land due to sea level rise would be over \$19 billion.

With almost 30% of Hawaii's current petroleum use going towards ground transportation⁴, passing ordinances that will accelerate clean transportation is one of the largest areas for climate impact.

The largest barrier to EV adoption growth is the inadequacy of EV charging infrastructure.

Although Hawaii is the ideal market to own an electric car due to short range commutes and sunny climate, the main barrier to owning an electric car in Hawaii is not cost, but charger availability. There are approximately 7,989 EVs on Oahu, 144 ChargePoint stations, 41 Volta stations, and 10 fast charging stations from HECO. Most apartments and homes on Oahu do not have EV chargers. I live in one of the newest, environmentally progressive buildings in

¹ "Hawaii pledges to eliminate fossil fuels from ground" 11 Dec. 2017, <https://www.bizjournals.com/pacific/news/2017/12/12/hawaii-counties-pledge-to-eliminate-fossil-fuels.html>

² "HB2182 CD1 - Hawaii State Legislature." https://www.capitol.hawaii.gov/session2018/bills/HB2182_CD1_.htm.

³ "July 2019 was hottest month on record for the planet - NOAA." <https://www.noaa.gov/news/july-2019-was-hottest-month-on-record-for-planet>.

⁴ "2019 Hawaii Energy Facts & Figures (PDF) - Hawaii State" https://energy.hawaii.gov/wp-content/uploads/2019/07/2019-FF_Final.pdf.

Kakaako and there are 4 chargers out of 655 stalls. Meanwhile the nearby Ala Moana shopping center has 12 chargers out of 11,000 stalls and the Prince Waikiki Hotel has 500+ rooms and 2 chargers. Lesser percentages of EV chargers to stalls is common at various hotels, commercial buildings and multi unit housing across the island.

Charging locations are in short supply and are not representative of both current needs and projected growth. Hawaiian Electric expects the ownership of electric vehicles to increase to 430,000 on Oahu by 2045, as reported by Brennon Morioka, the utility's general manager for electrification of transportation. Knowing home ownership rates in Hawaii fluctuate between 50-59%, this leaves half of Hawaii residents and 100% of tourists dependant on associations and businesses to install EV charging across the island at their convenience instead of at EV driver necessity.

Avoiding adoption costs today will force families to pay a higher price to operate gasoline vehicles both in their current monthly bills and the shared increased cost to retrofit buildings in the future.

According to the US census data, 80% percent of adults living in poverty in 2016 reported that they had access to a vehicle. The average driver in Hawaii will spend almost \$2000 every year on gasoline. To exempt affordable housing from having EV ready charging will further burden families with the high costs of maintaining those gasoline vehicles.

Numerous other cities across the United States have adopted ordinances to increase EV ready stalls and have not exempted affordable housing units. In 2018, the Vancouver Council increased the requirement for EV-ready parking stalls in multi-unit residential buildings from 20% to 100%⁵. This bill will greatly improve Oahu's building codes, but could be made a lot stronger to catch up to the current sustainability needs for our island.

Kahana Foundation **supports** Bill 25 and thanks you for this opportunity to testify.

Respectfully,



Tenaiya Brookfield
Co-Founder & Director of Outreach
Kahana Foundation
Contact@KahanaFoundation.org

⁵ "City of Vancouver goes 100% EV in New Builds - Plug In BC."
<https://pluginbc.ca/city-vancouver-goes-100-ev-new-builds/>.



TESTIMONY OF TINA YAMAKI
PRESIDENT
RETAIL MERCHANTS OF HAWAII
February 27, 2020
Re: BILL 25 (2019) RELATING TO ENERGY CODE

Good morning Chairperson Menor and members of the Honolulu City Council's Committee on Zoning Planning and Housing. I am Tina Yamaki, President of the Retail Merchants of Hawaii and I appreciate this opportunity to testify.

The Retail Merchants of Hawaii (RMH) is a statewide not-for-profit trade organization is committed to support the retail industry and business in general in Hawaii. The retail industry is one of the largest employers in the state, employing 25% of the labor force.

The Retail Merchants of Hawaii currently OPPOSES both Bill 25 (2019) CD1 and the Proposed CD2 Relating to the Energy Code as presently written.

Retailers continue to be concerned about our aina and have supported many initiatives that preserve and protect our environment. However, The Retail Merchants of Hawaii does not support Bill 25 (2019) CD1 or CD2 as presently written. These bills mandate that all new commercial buildings that have twelve or more parking stalls must have at least 25 percent of the parking stalls be electric vehicle charger ready.

EVs still makes up only 1% of the cars on Hawaii's roadways with our understanding that the majority of the EV ownership is in the urban areas. Last year alone, luxury vehicle Tesla made up over 70% of the new EVs sold in Hawaii. Automobile manufactures like Jaguar, Audi, BMW and Mercedes Benz have joined Tesla in launching high profile electric cars this year as well.

While we understand the City Government wants to reach their energy goal, we must also look at the bigger picture in an effort to protect the consumer and the price of living in Hawaii. **Mandating the installation of EV ready parking stalls will increase the overall cost of living in Hawaii even higher than it is now.** Hawaii is already well known to have a high cost of living. PayScale states that in Hawaii the national average is 88% higher than the rest of the nation. Hawaii's housing is 202% higher, utilities 89% higher and groceries 62% higher. We would also like to point out that the Office of Climate Change, Sustainability and Resiliency cost estimates of EV parking is based on what it would cost in California and not what it would truly cost in Hawaii, which would be a lot higher.

Who will ultimately pay for the EV charger infrastructure at retail locations and shopping malls? It will be everyone regardless if they drive an EV or not as the cost will be passed on to **our kupuna, keiki, family friends and neighbors - the consumer - when they purchase food, clothing, school supplies, healthcare products, electronics and more.**

While we are appreciative of the lower minimum of 20% EV ready charging stations for retailers, this measure also decreases the minimum number of stalls from the States 100 parking stalls to 12 stalls. **The proposals do not consider the ADA parking requirements needed for car and van accessibility.** At least one of the stalls has to be ADA compliant as well as be van accessible. The ADA stall(s) could not be included as an EV charger stalls as not all ADA vehicles are electric. By law only EV can park in EV designated charging stalls and only ADA permitted vehicles can park in ADA stalls. We must also note that ADA van accessible stalls equate to TWO parking stalls.

Shopping habits have changed with people limiting their time to shop. We must also recognize that not all retailers are alike. For small standalone stores and convenience stores, customers are in and out in a few minutes. With limited parking you would not want someone parked in a stall for a few hours to charge their car. You would want a constant flow.

While we recognize that it is cheaper to install the EV ready chargers in the initial building stage, the fact is still the number of chargers mandated are high and that it would increase the cost of the project and will lead to higher lease rents. For those in the malls who want to reconfigure or repave their parking lots or expand, this mandate would come into effect and would be passed on to the mall tenants in the form of higher rent or a Common Area Maintenance Charge (CAM), who intern would pass the cost on to the customer.

We are already seeing a mass exodus of our local residents moving to the mainland where it is cheaper to live. Many of our retailers statewide are already operating on a thin margin, especially mom and pop stores who cannot afford to absorb the increase. **Businesses are already closing their doors as they can no longer afford to keep them open due to the higher cost of rent or customers stop coming because they can find the items cheaper online.** This year alone, we have already seen a few long-time restaurants and stores closing for good citing the increase in rent and the cost of doing business in Hawaii.

This mandate may discourage businesses from renovating or repaving the pothole ridden parking lots.

Retailers and shopping malls already provide these "reserved parking spaces" and many with a FREE charging station for electric vehicles. While retailers could use EV stations that charge the customer while hooked up, many do not as the cost to purchase the equipment is very expensive and the cost would be passed on eventually to the customers. Retailers biggest competitor is online sites. Customers are very price sensitive when shopping and have no problem by passing stores and shopping online. Retailers use the FREE EV Stations to keep costs down and maintain affordability for their products and services.

Furthermore, **Shopping malls and retailers outside of the urban areas find that their EV charging stations are not being used very often.** We believe that the market and customers should continue be the influencers in business trends and operations and not government mandates. **New shopping centers, especially in the urban core areas are already including an increase in EV chargers and EV charger ready stalls when building and expanding.**

Retailers and Shopping Centers are not in the business of refueling/recharging. Many of our members have found EV drivers in the surrounding neighborhood and condominiums come to plug into the retailers charging stations to avoid increasing their electric bill at home or because their complex does not have EV charging capabilities. The EV stalls come at a cost to businesses who must provide additional security, signage, towing and more when people try to charge their cars after the malls are closed. Furthermore, these residents leave their cars AND are NOT shopping in the stores while their batteries are being recharged during mall hours. Thus, these residents are taking away the EV stall from customers coming to shop and who may turn away if there is no EV parking.

We are concerned that government will begin to mandate "reserved parking stalls" for all of the various types alternative gas powered vehicles and that businesses with large parking lots would just become a reserved parking charging station for the public and not able to offer convenient parking for the customers that actually shop in the stores. New technology is constantly being developed regarding the actual charging station. However, organizations such as the Society of Automotive Engineers (SEA) and companies such as Qualcomm have been helping develop new wireless charging standards which may become integrated into all future EVs. New battery technologies are being investigated by major players, promising greater densities and longer ranges. **We would also like to point out that with the advancement of technology, the newer model Electric Vehicles can travel further distances.** There are also other cars being developed that uses alternatives to traditional gas-powered car like that of hydrogen fuel cell.

We should be encouraging a new cottage industry to build quick charging stand alone stations like that of a traditional gas station. We are already seeing and should be encouraging Hawaiian Electric Company to install more fast charging stand-alone stations. As well as offering an incentive for others to follow.

Government mandates like this does drive up the cost of doing business that in turn drives up the cost of living in Hawaii. **We urge you not to impose another government mandate on retailers that would drive up the cost of living in Hawaii and ask that you exempt retail from this measure.**

Again mahalo for this opportunity to testify.

February 27, 2020

The Honorable Ron Menor, Chair
and Members
Committee on Zoning, Planning and Housing
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawai'i 96813

Dear Chair Menor and Committee Members:

SUBJECT: Bill 25 (2019) Testimony

Thank you for the opportunity to provide testimony by way of technical expertise of Bill 25, which adopts the Hawai'i State Energy Code and 2015 International Energy Conservation Code ("IECC"), with local amendments.

The American Council for an Energy-Efficient Economy ("ACEEE"), a nonprofit, 501(c)(3) research organization, serves as a catalyst to advance energy efficiency policies, programs, technologies, investments, and behaviors. We are working for a future in which energy efficiency helps the United States achieve economic prosperity, energy security, and a healthy environment.

The value of energy efficiency in properly implemented construction standards is universally recognized as the easiest and most cost-effective way to help consumers save energy and money, making housing more affordable and reducing air pollution. All these benefits are difficult or impossible to capture if not taken into consideration at the time of construction. Updating from the 2006 IECC to the 2015 IECC represents an improvement of over 30% in energy efficiency and introduces a new performance path called the Energy Rating Index (ERI).

Among the many positive benefits in the City and County of Honolulu's ("the City") proposed code update, the below provisions will help the City advance energy efficiency and meet its ambitious resilience and carbon pollution reduction goals:

1. Require that homes be photovoltaic-ready and electric vehicle ("EV")-capable for Level 2 charging
2. Adding flexibility for how developers can make new construction EV-ready

Implementing these proven and cost-effective approaches to reduce emissions from homes and promote EV use helps cities encourage lower long-term costs for residents and build more efficient and healthy homes. Cities are adopting such strategies in efforts to reach their ambitious goals to combat the climate crisis.

Honolulu ranked 47 out of 75 cities in ACEEE's 2019 City Clean Energy Scorecard report. Initiatives, such as Bill 25, will work to bring Honolulu into a more competitive standing compared to peer cities around the country. Updating the energy code will also put Honolulu on a path toward compliance

with future IECC updates, unlocking more energy savings and long-term cost reductions for the residents of O'ahu.

Thank you for the opportunity to submit testimony regarding Bill 25. Should you have any questions about our testimony, please feel free to contact us at:

Lauren Ross, PhD

Local Policy Program American Council for an Energy-Efficient Economy

202-507-4039

aceee.org



Chamber of Commerce HAWAII

The Voice of Business

**Testimony to the City & County of Honolulu City Council
Committee on Zoning, Planning and Housing
Thursday, February 27, 2020 at 9:00 A.M.
Committee Meeting Room, Honolulu Hale**

**RE: BILL 25 (2019) CD1, PROPOSED CD2, RELATING TO ADOPTION OF THE
STATE ENERGY CONSERVATION CODE**

Chair Menor, Vice Chair Waters, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") has concerns regarding Council Bill 25 CD1, Proposed CD2, which would regulate the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 2,000+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

Hawaii continues to play a leading role in protecting our environment and increasing energy efficiency, and the Chamber recognizes the need to find solutions to address climate change. We understand the intent of this bill; however, we remain concerned about the impact that some of the mandates proposed in Bill 25 could have on affordable housing markets across Oahu. Hawaii has continuously been labeled as one of the most expensive housing markets in the country, and the State Legislature is considering a package of bills this session to address the cost of living in Hawaii.

During a time when we need to be looking at solutions to address affordable housing in our state, we need to be careful that any proposals or mandates will not ultimately place the burden on the communities that we are hoping to help. Policies need to be shaped to create common ground, especially so that businesses can have the flexibility to develop and create practical, reasonable and rational solutions to address these important issues.

Thank you for the opportunity to testify on Council Bill 25 CD1, Proposed CD2.

BILL 25 – Outline of LURF's Testimony

1. **ORIGINAL PURPOSE: Pass two issues that failed at the Legislature in 2019**
 - **De-facto ban on Gas Water Heaters** (which has since been removed from the bill)
 - **Mandate for 25% EV charger ready parking stalls.**
 - State did a study on installing EV charging stations in Multi-Unit Developments (MUDs). It did NOT recommend mandates.
2. **LURF & MEMBERS ARE LEADERS IN RENEWABLE ENERGY:** over 100 years; first developers to voluntarily do 100% solar water heaters
3. **LURF SUPPORTS THE INTENT AND MOST OF THE PROVISIONS OF BILL 25** (Only recommending amendments to a few issues)
4. **STAKEHOLDERS:** Home builders, Hawaiian Electric, Hawaii Gas, Hawaii Auto Dealers Association, LURF, developers, construction unions, etc.
5. **LURF & STAKEHOLDERS POSITION:** All Stakeholders support renewable energy, but **Bill 25 includes excessive and unnecessary costs that will increase the costs of housing for low-income families, middle income families, and families of all income levels who wish to purchase a new home**
6. **NEW PROPOSED MANDATES IN BILL 25.** Include:
 - new City mandates (25% of all parking stalls must be EV charger-ready; Solar water heaters; Air-tightness sampling/testing, required Ceiling Fans)
 - new International Energy Conservation Code (IECC) requirements
 - new State Energy Conservation Code (SECC) requirements
7. **BILL 25 MANDATES WILL SUBSTANTIALLY INCREASE THE COSTS OF AFFORDABLE HOUSING**
 - TOTAL Costs of All Proposed Mandates (City, IECC & SECC): **Between \$4,205 to \$18,702 per dwelling unit.** (See attachment: 200212 Bill 25 COST ESTIMATES_Admin_IECC_+SECC)
8. **INCREASED COSTS & HOUSING PRICES WILL BE AN OBSTACLE FOR THE DEVELOPMENT OF AFFORDABLE HOUSING AND LOW-INCOME HOME BUYER QUALIFICATION FOR MORTGAGES.**
 - These additional per-unit costs will have the unintended consequence of increasing the costs of much-needed affordable housing and increased housing sales prices for market homes
 - See DR Horton's testimony regarding the impact of increased prices on buyer qualifications
9. **STAKEHOLDERS' VERSION MAKES BILL 25 BETTER (Home builders, LURF, Hawaiian Electric, Hawaii Gas, etc.)**
 - All single family and duplex housing will be built PV-ready (so entire roof can be used for PV when the homeowner can afford it)
 - All single family and duplex enclosed garages will be built Level 2 charger-ready
 - **Stakeholder's Table: Total Vehicles Charged within a 12-hour period = 90 (30 more than Original Admin Bill 25 and CD1 baseline requirement)**

BILL 25 – Outline of LURF's Testimony

- **Stakeholder's Table: Total Vehicles Charged within a 16-hour period = 120 (60 more than Original Admin Bill 25 and CD1 baseline requirement)**

10. **ENERGY CONSERVATION CODE WILL BE REVISED AGAIN IN NEXT TWO YEARS**
(this is 2016 update)

11. **AMENDMENTS PROPOSED BY STAKEHOLDERS & LURF MEMBERS:**

- **REVISE: Table C406.8.2 ELECTRIC VEHICLE READINESS POINTS BASED COMPLIANCE VALUES: ADD Stakeholder's Proposed EV Points Table, which actually makes Bill 25 much better than the Admin's original Bill 25 and the CD1.**
- **Exemption for Affordable Housing** (140% AMI and below) from EV charger-ready requirements.
- **Exemption for Existing Buildings and Parking Lots** from EV charger-ready requirements (Construction of improvements to existing structures are funded by operations and maintenance funds set aside by the building association. New construction is funded by debt financing.) Maybe can do a study, like State study on Multi-Unit Developments (MUDs).
- **Exemptions for Hospitals** from EV charger-ready requirements
- **City should "Walk the Talk" - Add City EV charger-ready requirements from Bill 25 (2018)** This is a 2018 bill, currently in the Council Transportation Committee, which requires:

"For all new construction and reconstruction of city facilities that provide at least 12 off-street parking spaces for public or employee parking, at least 25 percent of the parking stalls must be electric vehicle AC Level 2 charger ready. For the construction or reconstruction of fewer than 12 stalls, at least one stall must be electric vehicle AC Level 1 charger ready."

12. **REQUIRE: CITY PLAN TO FINANCE & BUILD EV CHARGING STATIONS.** Request and amendment requiring the City to create a plan for the City to fund and build EV charging stations like Mainland cities, including California and New York, etc. *(Don't ask other people to do something that you would not do yourself)*

13. **REQUIRE: INCENTIVES.** Request and amendment: **BEFORE** these high cost impacts are mandated on low-income people - the City should be required to create a plan for the City to provide Rebates and Real Property Tax Credits to assist with additional costs of Bill 25. (Government should not just impose additional costs on housing for low-income and middle income people - Government should help them satisfy those costly mandates) (Btw, what about the existing million-dollar homes?)

B10 25 - Estimated Costs

2/12/2020

Based on CD2 (Elefante) with Hand Carry Amendment (Elefante) as presented at 1/23/2020 Zoning, Planning and Housing Committee Hearing.

B10 25 - Subsection	Cost Range per SF Home	Cost Range per MF Unit	Comment
C206.8 Electric Vehicle Infrastructure		\$1,400 - \$1,500	Multi-family - Underground infrastructure. Based on engineer's estimate of 120 unit condo project. Multi-family - Upgrades to transformers and electrical infrastructure. This cost is project specific and determine by HECO during the design phase of the project. It could require no additional transformers or it could require a doubling of transformers. Transformers cost between \$30,000 - \$40,000 each. The 120 unit condo project has 9 transformers without EV requirements.
		\$0 - \$3,000	Cost difference between a solar hot water system vs an instant gas water heater. Based on subcontractor bid pricing.
R403.5.5 Solar Water Heating	\$4,550 - \$7,502		
R404.2 Solar Conduit and Electrical Panel Readiness		\$250 - \$500	Multi-family - building infrastructure (including required fire stopping)
		\$350 - \$500	Single Family - house infrastructure.
R404.3 Electric Vehicle Readiness		\$350 - \$500	Single Family - house infrastructure.
		\$100 - \$300	Depends on # of plan/bldg types and # of each type. Note: additional cost is reduced since the State Energy Code requires testing for all homes.
R402.1.3 Sampling		\$150 - \$600	Addition/upgrade to 3-wire fan junction boxes. Note: additional cost is reduced since the State Energy Code requires the installation of ceiling fans for all homes.
R403.6.2 Ceiling Fans (Exception)		\$150 - \$600	
B10 25 - Total Estimated Cost Range	\$5,500 - \$9,402	\$1,900 - \$5,900	

IECC + SECC - Estimate Costs

Based on 2012 IECC + SECC Approved Amendments.

Subsection	Cost Range per SF Home	Cost Range per MF Unit	Comment
SECC - R402.3.2 Glazed Fenestration SHGC	\$200	\$175	Upgrade from SHGC 0.30 to 0.25.
IECC - R402.4 Air Leakage	\$1,000 - \$7,000	\$1,000 - \$3,000	Upgrade building thermal envelope.
IECC - R403.6 Mechanical Ventilation	\$1,400	\$850	Upgrade bathroom exhaust fans.
IECC - R404.1 Lighting Equipment	\$700	\$280	Upgrade to all LED Lighting Fixtures.
IECC - Total Estimated Cost Range	\$3,300 - \$9,300	\$2,305 - \$4,305	
IECC + SECC + B10 25 - Total Estimate Cost Range	\$8,800 - \$18,702	\$4,205 - \$10,205	



HONOLULU COUNTY INCOME SCHEDULE BY FAMILY SIZE

2019

THE FOLLOWING TABLE PRESENTS INCOME LIMITS BY FAMILY SIZE AND BY PERCENTAGES OF THE VERY LOW INCOME LEVELS ESTABLISHED BY HUD. THESE INCOME LIMITS SERVE AS GUIDELINES TO ESTABLISH SALES/RENTAL PREFERENCES.

MEDIAN \$99,000 Adjustments for family size	LIMITS BY FAMILY SIZE								
	1 PERSON	2 PERSON	3 PERSON	4 PERSON	5 PERSON	6 PERSON	7 PERSON	8 PERSON	9 PERSON
	0.7000	0.8000	0.9000	1.0000	1.0800	1.1600	1.2400	1.3200	
10%	\$8,440	\$9,640	\$10,850	\$12,050	\$13,020	\$13,980	\$14,950	\$15,910	
20%	\$16,880	\$19,280	\$21,700	\$24,100	\$26,040	\$27,960	\$29,900	\$31,820	
30%	\$25,320	\$28,920	\$32,550	\$36,150	\$39,060	\$41,940	\$44,850	\$47,730	
40%	\$33,760	\$38,560	\$43,400	\$48,200	\$52,080	\$55,920	\$59,800	\$63,640	
50%	\$42,200	\$48,200	\$54,250	\$60,250	\$65,100	\$69,900	\$74,750	\$79,550	
60%	\$50,640	\$57,840	\$65,100	\$72,300	\$78,120	\$83,880	\$89,700	\$95,460	
70%	\$59,080	\$67,480	\$75,950	\$84,350	\$91,140	\$97,860	\$104,650	\$111,370	
80%	\$67,520	\$77,120	\$86,800	\$96,400	\$104,160	\$111,840	\$119,600	\$127,280	
90%	\$75,960	\$86,760	\$97,650	\$108,450	\$117,180	\$125,820	\$134,550	\$143,180	
100%	\$84,400	\$96,400	\$108,500	\$120,500	\$130,200	\$139,800	\$149,500	\$159,100	
110%	\$92,840	\$106,040	\$119,350	\$132,550	\$143,220	\$153,780	\$164,450	\$175,010	
120%	\$101,280	\$115,680	\$130,200	\$144,600	\$156,240	\$167,760	\$179,400	\$190,920	
130%	\$109,720	\$125,320	\$141,050	\$156,650	\$169,260	\$181,740	\$194,350	\$206,830	
140%	\$118,160	\$134,960	\$151,900	\$168,700	\$182,280	\$195,720	\$209,300	\$222,740	

1.7000
80% family

% of income

% of income

130%
80%
140%

The U.S. Department of Housing and Urban Development (HUD) sets income limits that determine the eligibility of applicants for its assisted housing programs. HUD typically uses the Very Low-Income Limit (VLIL) as the basis for deriving other income limits. The VLIL is calculated by taking the 4-person income limit equal to 50% of the estimated median family income (based on the U.S. Census Bureau's ACS median family income estimates) and making adjustments if this income is outside formula constraints. For example, the VLIL is increased for areas where rental housing costs are unusually high in relation to the median income or if it is less than the relevant State non-metropolitan median family income level. See "FY2019 Breifing Materials" at <https://www.huduser.gov/portal/datasets/mtsp/FY19.pdf>

HHFDC uses the HUD income limits for households at the 50% and 60% income levels as calculated for the Multifamily Tax Subsidy Project (MTSP) charts. For HHFDC programs, the 80% income level is calculated as the Multifamily Tax Subsidy Project (MTSP) VLIL (for FY 2019, it is also the HUD Section 8 VLIL) multiplied by 1.6 (or 80/50). The limits for households at other income levels are calculated in the same way. For further information see "Multifamily Tax Subsidy Income Limits" at <https://www.huduser.gov/portal/datasets/mtsp.html>

NOTE: This chart is provided as a guide only. You are responsible to ensure the accuracy of the numbers.

Testimony of
Pacific Resource Partnership

City & County of Honolulu
Committee on Zoning, Planning and Housing
Councilmember Ron Menor, Chair
Councilmember Tommy Waters, Vice Chair

Bill 25 (2019) CD1 Relating to Adoption of the State Energy Conservation Code

Thursday, February 27, 2020
9:00 A.M.
Committee Meeting Room

Aloha Chair Menor, Vice Chair Waters, and Members of the Committee:

Pacific Resource Partnership (PRP) has been actively working with affordable housing stakeholders and community groups, at both the state and county levels, to address the shortage of affordable housing in the State of Hawaii.

PRP conducted state-wide polling in 2019 which validated Hawaii's lack of affordable housing, high cost of living, and net out-migration quantified in the Aloha United Way's 2017 ALICE report and the more recent Hawaii Financial Health Pulse. The latter report showed that 54% of Hawaii's residents have spending that equals or exceeds their income.

While the City and County of Honolulu's Office of Climate Change, Sustainability and Resiliency celebrates Pillar 1, Remaining Rooted, as "ensuring an affordable future for our island," the City has largely resisted accepting quantified negative impacts to affordable housing including, but not limited to, the effect increased housing prices will have on the financing of affordable housing projects, and the negative impacts increased housing prices will have on low-income buyers' average debt-to-income ratios.

According to the 2019 Hawaii Housing Planning Study, the top two of six reasons people are not buying homes in the City and County of Honolulu are: 1) it is too expensive (57.3%); and 2) they cannot afford the down payment (33.9%).

With a demand for 22,168 new homes in the City and County of Honolulu over the next five years (2020-2025), we should not view affordable housing as a binary choice lined up against resiliency, sustainability and climate change. Our residents must be able to live and raise families in the communities they collectively fight to sustain and improve.

Given the above, PRP encourages this Committee to find a balance between housing affordability and resiliency, sustainability and climate change measures, in particular, the notion of an exemption or break for affordable housing projects as defined by the Council in Bill 58 (2017), Bill 59 (2017), and Ordinance 18-1. During the deliberations on those bills, the Council recognized the added burden of government-imposed



(Continued From Page 1)

fees and regulations and specifically exempted a number of costly requirements to make affordable projects possible. We ask the Council to keep that same attitude in mind when approaching a final version of Bill 25 (2019). Thank you for this opportunity to submit written testimony.



STANFORD CARR DEVELOPMENT, LLC

February 26, 2020

The Honorable Ron Menor, Chair
The Honorable Tommy Waters, Vice Chair
Members of the Committee on Zoning, Planning and Housing
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawaii 96813

RE: Testimony for Bill 25 (2019), CD2 Proposed Amendments

Dear Chair Menor, Vice Chair Waters and Councilmembers:

Stanford Carr Development, LLC (SCD) submits this testimony providing comments to the proposed amendments by the Office of Climate Change, Sustainability and Resiliency relating to Bill 25 (2019). We commend the City Council in their efforts to combat climate change, however, we wish them to consider the bill's impact on the development of much needed affordable housing.

The current language of Bill 25 hampers our ability to build affordable housing. Developing affordable housing is hard enough to make financially feasible and added costs will only make it more difficult. Specifically, we suggest that C406.8 be revised to exempt all households earning up to 140% of the Area Median Income (AMI). In addition, we respectfully ask that subsection number three (3) be deleted in its entirety.

We recently finished construction on Hale Kewalo, a rental apartment building with 128-units consisting of one, two, and three-bedrooms reserved for families earning between 30% and 60% of the AMI with units renting for as low as \$813 a month. This project was only feasible by maximizing government subsidies including the use of 4% Low-Income Housing Tax Credits coupled with tax-exempt private bonds. The current language in Bill 25 stands to make it near impossible to build similar projects in the future.

In closing, we at SCD appreciate the opportunity to provide testimony imploring the City Council to be prudent and wise in their efforts to combat climate change. We ask that the Council weigh the cost of such measures against the need for affordable housing.

Sincerely,

Stanford S. Carr